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ABSTRACT

This research asked whether there was a difference in student outcomes in courses taught in both Internet-based and campus-based formats. Thirty-four courses were offered in both Internet-based and campus-based formats at Nova Southeastern University (Florida) during fall term 1999, enrolling 1,613 undergraduate and graduate students. Outcomes were evaluated on two dimensions: successful grades (D+ or better) and course completion rates (completers vs. noncompleters). Statistical analysis revealed that the campus-based format was the most successful for undergraduates, with grades 11 to 13 percent higher and completion rates 14 percent higher. However, undergraduates' final grades were not significantly different in the Internet-based or campus-based formats. Graduate students performed better in Internet-based than in campus-based sections, for grades overall, for completion rates, and for final grades. The study found that both undergraduate and graduate students had high rates of success (greater than 75 percent for grades) and completion (greater than 80 percent). Nova Southeastern compared favorably with other universities on completion rates. Report sections include an introduction, methodology, results, and discussion. Data tables are appended. (Contains 11 references.) (CH)

COMPARISON OF SELECTED STUDENT OUTCOMES FOR INTERNET- VERSUS CAMPUS-BASED INSTRUCTION

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Report 00-08

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Jeffrey V. Fredda — **Research Associate**
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EXECUTIVE SUMMARY

Due to the increasingly competitive distance education market and the need to monitor institutional effectiveness, it is imperative to evaluate the success of students enrolled in Nova Southeastern University's distance education programs. While the Office of Research and Planning has studied the comparability of student success in campus-based and distance education sites (MacFarland 1998a, 1998b, 1998c, 1998d, 1998e, 1998f), Internet-based courses were not studied as a unique group. This report provides the first comparison of student outcomes in courses taught in both Internet-based and campus-based formats.

Examination of student final grades revealed that undergraduate and graduate students performed well in courses offered in both Internet-based and campus-based formats. For undergraduate students in campus-based sections it appears that there is a greater rate of successful grades and higher completion rates. However, there was not a statistically significant difference between final grades of those who completed the course in either Internet-based or campus-based formats.

In contrast, graduate students in Internet-based sections performed better than those in campus-based sections, having a greater rate of both successful grades and completion rates. Additionally, when considering those who completed the courses, graduate students in Internet-based sections had higher final grades than those in campus-based sections at a statistically significant level. Internet and campus-based courses in academic centers are examined further in the text.

The implications of these findings are numerous. First, undergraduate students in Internet-based sections that completed the course had final grades similar to those in campus-based sections, though success and completion rates for undergraduates were lower in Internet-based sections. Second, student outcomes in Internet-based courses are comparable to campus-based courses for graduate students. Third, future research should explore the observed differences in student outcomes of undergraduate and graduate students in Internet-based sections. Finally, completion rates for students in Internet-based courses at Nova Southeastern University compare favorably with other universities.

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INTRODUCTION

With advancements in technology an increasing number of universities are offering distance education programs (CarChidi & Peterson, 2000), serving an estimated 1.6 million (duplicated) students enrolled in 1997 – 1998 (The Institute for Higher Education Policy, 2000). Though distance-based instruction is becoming more common, many institutions are reporting low completion rates for Internet-based courses (Carr, 2000). Due to the increasingly competitive distance education market and the need to monitor institutional effectiveness, it is imperative to evaluate the success of students enrolled in Nova Southeastern University's Internet-based courses.

While the Office of Research and Planning has studied the comparability of student success at campus-based and distance education sites (MacFarland, 1998a, 1998b, 1998c, 1998d, 1998e, 1998f), Internet-based courses were not studied as a unique group. The purpose of the present research was to examine courses taught in both Internet-based and campus-based formats and answer the following question:

> *Is there a substantial difference in student outcomes in courses taught in both Internet-based and campus-based formats?*

METHODOLOGY

Course Sections

Thirty-four courses were offered in both Internet-based and campus-based formats at Nova Southeastern University during the Fall Term of 1999. Eleven courses were taught at the undergraduate level and 23 were offered at the graduate level in either the Wayne Huizenga Graduate School of Business and Entrepreneurship or the Fischler Graduate School of Education and Human Services. One hundred and thirty-eight sections of the 34 courses were offered (Appendix A, Table 1a). Note: some campus-based sections were directed independent study.

Participants

One thousand, six hundred and thirteen students were enrolled in all of the sections studied. Both undergraduate and graduate students were included in the study (Appendix A, Table 2a). For a listing of student enrollments and section numbers by course and academic center refer to Appendix A, Tables 3a-5a.

Operational Definitions

- *Internet-based* – sections that were offered electronically via the Internet. Internet-based course content is similar to that in courses offered in the campus-based lecture format, only the modality through which information is shared is different. Students enrolled in Internet-based sections engaged in the following activities:

1. Received lectures offered in PowerPoint, video, and/or audio format
2. Accessed library information (including full text articles)
3. Completed coursework
4. Received professor feedback
5. Discussed pertinent topics in real time with fellow students and faculty

- *Campus-based* – Traditional lecture-based sections that were offered at Nova Southeastern University's Davie and Ft. Lauderdale facilities.

Grades

While standard final grades (*A*, *B*, *C*, etc) were included in this study, less common grades were included as well. These were defined as:

- *I* - Incomplete
- *W* – Student withdrawal
- *WU* – Administrative withdrawal
- *No grade/blank* – Faculty did not record a final grade in Nova Southeastern University's Banner student information system.

Dependent Variables

To understand potential differences between Internet-based and campus-based formats, undergraduate and graduate student outcomes were evaluated on two dimensions, successful grades (2 classifications) and course completion rates.

1. *Successful grades*

   - For *category 1* successful grades included *A*, *A-*, *B+*, *B*, *B-*, *C+*, *C*, *C-*, *D+*, and *D*. All other grades (e.g. *F*, *I*, *W*, *WU*, and *no grade/blank*) were categorized as unsuccessful. Note: Graduate programs do not award grades of *D+* or *D*; therefore this category included only undergraduate students and is a more liberal definition of success since it includes *D*'s.

   - For *category 2,* successful grades included *A*, *A-*, *B+*, *B*, *B-*, *C+*, *C*, and *C-*. All other grades were categorized as unsuccessful. Both undergraduate and graduate students were evaluated in this category. Note: Grades of *C+*, *C*, and *C-* are generally not considered successful by graduate programs. Since *D*'s are not included, this is a more restrictive definition of success for undergraduates.

2. *Completion Rates* – students receiving final grades of *I*, *W*, *WU, and no grade/blank* were categorized as "non-completers." Both undergraduate and graduate students were evaluated in this category.

Procedure

Final grades were obtained through multiple queries to Nova Southeastern University's Banner student information system and used for analysis by the statistical program SPSS, version 10.0. Letter grades were recoded into the numeric equivalent used by Nova Southeastern University (i.e. $A = 4.0$, $A- = 3.7$, $B+ = 3.3$, etc.) and used for analysis. Undergraduate and graduate student data were analyzed independently. Additionally, graduate student data were analyzed both collectively and segmented by academic center. For all statistical analyses an alpha level of 0.05 was used to determine significance.

One-way Analysis of Variance (ANOVA) tests were used to analyze student outcomes. Analysis of variance tests are used to determine if group values are equal by evaluating group means and standard deviations. Student outcomes for undergraduate and graduate students that completed the course were analyzed by a One-way ANOVA to determine if there was a statistically significant difference between final grades for students in Internet-based versus campus-based sections.

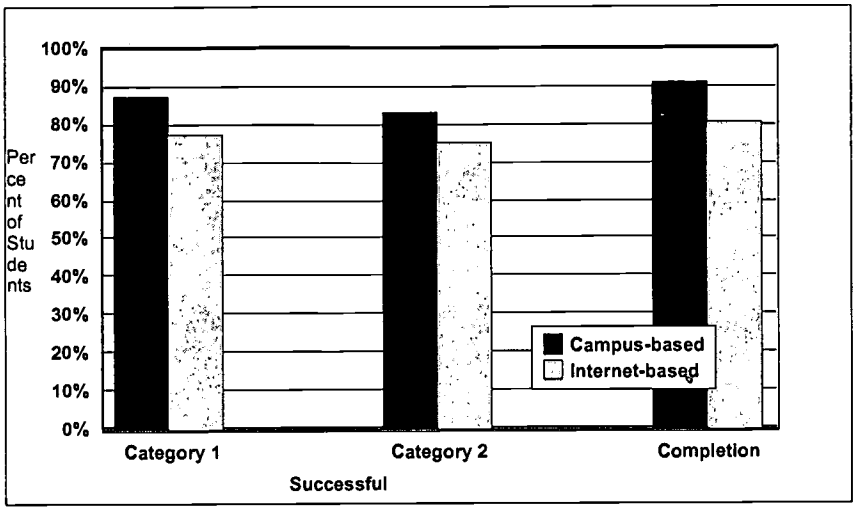
Chi-square tests were used to analyze student outcomes. Chi-square tests compare the rates of values for all categories of a variable to determine if the same proportion of values occur in each category. For the present study, chi-square tests were used to determine if there were equivalent rates of successful grades (i.e. *A*'s, *B*'s, *C*'s, etc.) and completion rates for students in Internet-based and campus-based courses.

RESULTS

Undergraduate Students

When using as a dependent measure both successful grades and completion rates it appears that undergraduate students in campus-based sections performed better than those in Internet-based sections (refer to Figure 1). However, the results of a one-way ANOVA did not reveal a statistically significant difference ($p = 0.17$) between final grades for undergraduate students in Internet-based versus campus-based sections (means of 3.37 and 3.18, respectively). For a distribution of final grades for undergraduate students in Internet-based and campus-based sections refer to Appendix A, Table 6a and Figure 1a.

Figure 1. Success and Completion Rates for Undergraduate Students in Internet-based versus Campus-based sections.



Success Rates - Category 1 (A, A-, B+, B, B-, C+, C, C-, D+, and D)

Eighty-seven percent of undergraduate students in campus-based sections and 77 percent of students in Internet-based sections were successful according to the more liberal criteria of category 1 (Table 1). A chi-square test revealed that this difference in successful grade rates was statistically significant ($p = 0.02$).

Table 1. Rate of Successful Grades (category 1) for Undergraduate Students in Internet-based and Campus-based sections.

	Format		Total
	Internet-based	Campus-based	
Successful			
Number	62	245	307
Percent	77%	87%	85%
Unsuccessful			
Number	19	36	55
Percent	23%	13%	15%
Total Students	81	281	362

Note: Undergraduate students in campus-based sections had a greater rate ($p = 0.02$) of successful final grades than those in Internet-based sections.

Success Rates - Category 2 (A, A-, B+, B, B-, C+, C, and C-)

A chi-square test revealed the difference in successful grade rates according to the more restrictive criteria of category 2 approached significance ($p = 0.06$). Eighty-three percent of undergraduate students in campus-based sections were successful while 75 percent of students in Internet-based sections were successful (Table 2).

Table 2. Rate of Successful Grades (category 2) for Undergraduate Students in Internet-based and Campus-based sections.

	Format		
	Internet-based	Campus-based	Total
Successful			
Number	61	237	298
Percent	75%	83%	82%
Unsuccessful			
Number	20	44	64
Percent	25%	17%	18%
Total Students	81	281	362

Note: The difference in successful final grades for undergraduate students in Internet-based and campus-based sections approached significance ($p = 0.06$).

Completion Rates

A chi-square test revealed there was a statistically significant difference in completion rates as well, $p < 0.01$. Ninety-one percent of campus-based undergraduate students completed the courses, while 80 percent of students in Internet-based sections completed the courses (Table 3).

Table 3. Rate of Completions for Undergraduate Students in Internet-based and Campus-based Sections.

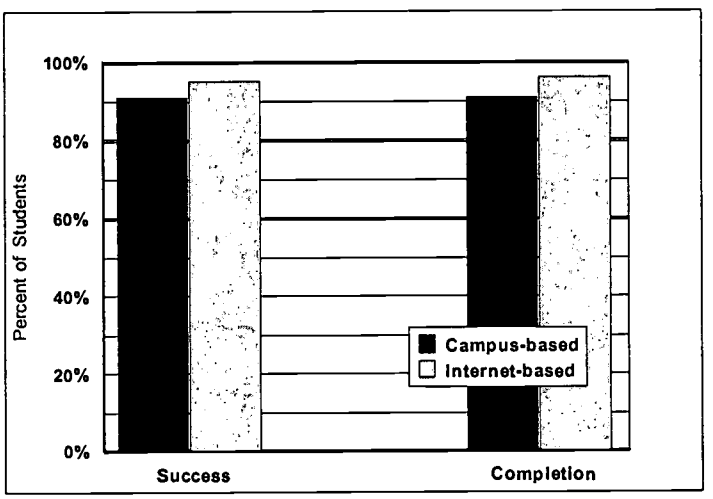
	Format		
	Internet-based	Campus-based	Total
Complete			
Number	65	256	321
Percent	80%	91%	89%
Incomplete			
Number	16	25	41
Percent	20%	9%	11%
Total Students	81	281	362

Note: Undergraduate students in campus-based sections had a greater rate ($p = 0.007$) of completions than those in Internet-based sections.

Graduate Students

When using both successful grades and completion rates as a dependent measure it appears that graduate students in Internet-based sections performed better than those in campus-based sections (Figure 2). Similarly, the results of a one-way ANOVA revealed a statistically significant difference ($p < 0.01$) between final grades for graduate students in Internet-based versus campus-based sections. Graduate students in Internet-based sections had higher final grades than students in campus-based sections (means of 3.75 and 3.61, respectively) at a statistically significant level. For a distribution of final grades for graduate students in Internet-based and campus-based sections refer to Appendix A, Table 7a and Figure 2a.

Figure 2. Success and Completion Rates for Graduate Students in Internet-based versus Campus-based sections.



Successful Grades (A, A-, B+, B, B-, C+, C, and C-)

A chi-square test revealed that overall, 95 percent of graduate students in Internet-based sections and 91 percent of students in campus-based sections were successful (success category 2) (Table 4). This difference was statistically significant ($p = 0.01$).

Table 4. Rate of Successful Grades (category 2) for Graduate Students in Internet-based and Campus-based Sections.

	Format		Total
	Internet-based	Campus-based	
Successful			
Number	341	811	1,152
Percent	95%	91%	92%
Unsuccessful			
Number	18	83	101
Percent	5%	9%	8%
Total Students	359	894	1,253

Note: Graduate students in Internet-based sections had a greater rate ($p = 0.01$) of successful final grades than those in campus-based sections.

Completion Rates

A chi-square test revealed a statistically significant difference in completion rates ($p = 0.07$). Ninety-six percent of graduate students in Internet-based sections completed the courses versus 91 percent in campus-based sections (Table 5).

Table 5. Rate of Completions for Graduate Students in Internet-based and Campus-based Sections.

	Format		Total
	Internet-based	Campus-based	
Complete			
Number	344	817	1,161
Percent	96%	91%	93%
Incomplete			
Number	15	77	92
Percent	4%	9%	7%
Total Students	359	894	1,253

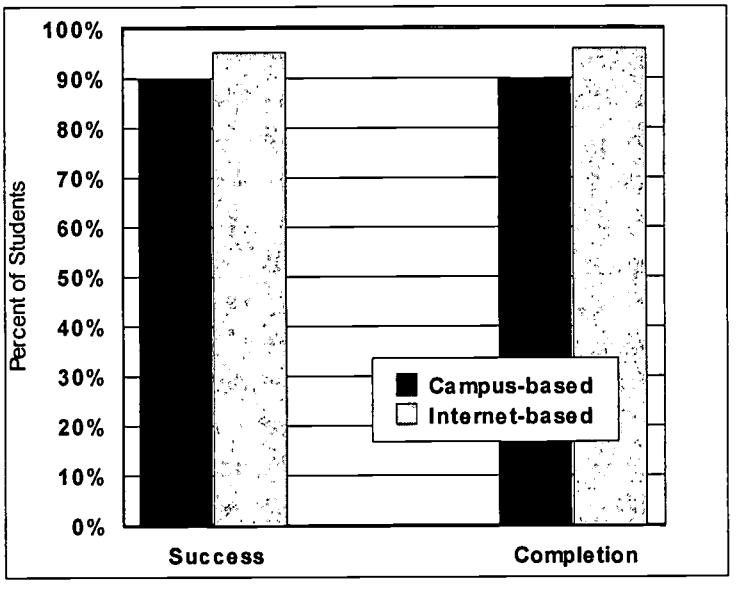
Note: Graduate students in Internet-based sections had a greater rate ($p = .007$) of completions than those in campus-based sections.

Graduate Academic Centers

Wayne Huizenga Graduate School of Business and Entrepreneurship

The results of a one-way ANOVA revealed that there was a statistically significant difference ($p = 0.03$) between final grades of Internet-based and campus-based students in the Wayne Huizenga Graduate School of Business and Entrepreneurship. Students in Internet-based sections had higher final grades than those in campus-based sections (means of 3.71 and 3.62, respectively).

Figure 3. Success and Completion Rates for Graduate Students in Internet-based versus Campus-based sections of the Wayne Huizenga Graduate School of Business and Entrepreneurship.



Success Rates

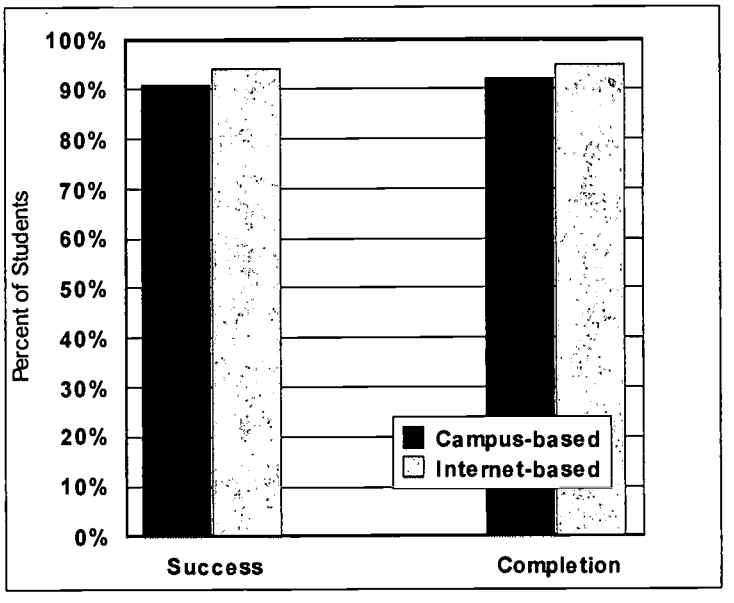
A chi-square test revealed a significant difference in success rates ($p = 0.02$). Ninety-five percent of graduate students in Internet-based sections received successful grades versus 90 percent in campus-based sections (Appendix A, Table 8a).

Completion Rates

A chi-square test revealed a significant difference in completion rates ($p = 0.01$). Ninety-six percent of graduate students in Internet-based sections completed the courses versus 90 percent in campus-based sections (Appendix A, Table 9a).

The results of a one-way ANOVA revealed that there was a significant difference ($p < 0.01$) between final grades of students enrolled in Internet-based and campus-based sections that completed the course. Students in Internet-based sections had significantly higher final grades than those in campus-based sections (means of 3.84 and 3.60, respectively).

Figure 4. Success and Completion Rates for Graduate Students in Internet-based versus Campus-based sections of the Fischler Graduate School of Education and Human Services.



Success Rates

A chi-square test did not reveal a significant difference in success rates for graduate students in the Fischler Graduate School of Education and Human Services ($p = 0.29$). Ninety-four percent of graduate students in Internet-based sections received successful grades versus 91 percent in campus-based sections (Appendix A, Table 10a).

Completion Rates

A chi-square test did not reveal a significant difference in completion rates ($p = 0.27$). Ninety-six percent of graduate students in Internet-based sections completed the courses versus 92 percent in campus-based sections (Appendix A, Table 11a).

DISCUSSION

This study was undertaken to evaluate selected student outcomes of Internet-based distance education at Nova Southeastern University. Statistical analyses were computed comparing both undergraduate and graduate Internet-based and campus-based sections offered in the Fall Term of 1999. The fundamental question was the following:

> *Is there a substantial difference in student outcomes in courses taught in both Internet-based and campus-based formats?*

Undergraduate Students

For undergraduate students the answer would have to be a qualified "yes." It seems that the more successful format for instruction of undergraduate students is the campus-based format, as there were greater rates of successful grades (category 1) and higher completion rates in campus-based than in Internet-based sections. While these differences were "statistically significant," they were practical differences as well since a substantial proportion of students had greater success and completion rates in the campus-based sections. Depending on the range of grades considered successful, there was an 11 to 13 percent higher rate of success in sections taught in the campus-based versus the Internet-based format. Similarly, there was a 14 percent higher rate of completed courses offered in the campus-based format. Final grades were not significantly different for students enrolled in Internet-based versus campus-based sections, however.

Graduate Students

When considering all graduate students, regardless of academic center, there was a significant difference in student outcomes. In contrast to the undergraduates, however, graduate students performed better in Internet-based than in campus-based sections; students in Internet-based sections had a statistically significant greater rate of successful grades and completion rates, as well as higher final grades.

It should be noted that the importance of the differences found is open to interpretation. Due to the nature of statistics, a large enough sample size will always result in the detection of a "statistically significant" difference, regardless of the magnitude of the differences (Hagan, 1997). It is up to the interpreter to determine if these "statistically significant" differences warrant any action. Practically, there were only four percent more successful final grades and one percent greater completion rates for graduate students in Internet-based sections. Similarly, a difference between mean final grades of students in Internet-based sections of 3.75 and students in campus-based sections of 3.61 is not dramatic. Differences in student outcomes from Internet and campus-based sections by academic center are also small in magnitude. Thus, although these differences were significant statistically, operationally, they may not be substantial differences.

Previous research on distance education at Nova Southeastern University has shown that distance education can be as effective as campus-based education. As with the present study, MacFarland (1998f) found that for some sections, students in the Wayne Huizenga Graduate School of

Business and Entrepreneurship had a greater rate of successful grades awarded at distance education-based sites than at campus-based sites. Similarly, MacFarland (1998d) found that for some sections, students in the Farquhar Center for Undergraduate Studies had a greater rate of successful grades awarded at distance education-based sites than at campus-based sites. Though MacFarland's (1998d) results seem to conflict with the patterns of undergraduate student outcomes in the present study, it should be noted that his findings were based on sections of all "off-campus" sites, not those exclusively Internet-based. Therefore, the results of the two studies are not directly comparable.

Both undergraduate and graduate students had high rates of success (>75 percent) and completion (>80 percent). However, an interesting finding of this study is that graduate students had higher rates of success and completion in Internet-based versus campus-based sections than undergraduates. There are numerous possible explanations for this finding. For example, it is possible that undergraduate students need more direct human contact and support to succeed. Perhaps graduate students have a greater commitment to education. The fact that graduate students as a group are older with more work experience than undergraduate students could result in a greater commitment to the field of study and the coursework. Future research should explore these possibilities to determine the cause(s) of these differences.

This report provided the first comparison of selected student outcomes in courses taught in both Internet-based and campus-based formats. Examination of final grades revealed that undergraduate and graduate students performed well in courses offered in both formats. It is helpful to compare completion rates for students in Internet-based courses at Nova Southeastern University with other institutions. According to Carr (2000) completion rates of Internet-based courses has been a concern for many universities, with completion rates ranging from approximately fifty to eighty percent. Nova Southeastern University compares favorably with these universities, having 80 percent completion rates for undergraduate students and ninety-three percent completion rates for graduate students in Internet-based courses.

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Appendix A

Data for Internet-based versus Campus-based Sections

Table 1a. Number of Internet-based and Campus-based Sections at the Undergraduate and Graduate Levels.

	Format		
Degree Level	**Internet-based**	**Campus-based**	**Total**
Undergraduate	14	26	**40**
Graduate	44	54	**98**
Total	**58**	**80**	**138**

Table 2a. Number of Students Enrolled in Courses Offered in both Internet-based and Campus-based Formats.

	Format		
Degree Level	**Internet-based**	**Campus-based**	**Total**
Undergraduate	80	280	**360**
Graduate	359	894	**1,253**
Total	**439**	**1,174**	**1,613**

Table 3a. Enrollments and Section Numbers for Internet-based and Campus-based Courses in the Farquhar Center

Major	Course	Title	Students			Sections		
			Internet-based	Campus-based	Total	Internet-based	Campus-based	Total
Business and Administration Studies								
	BUSS 3050	Organizational Theory	3	9	12	1	2	3
	BUSS 4610	Business Research Methods	25	84	109	3	6	9
	BUSS 4880	Business Strategy and Policy	12	2	14	1	1	2
	MGMT 2050	Principles of Management	11	10	21	1	1	2
	MGMT 3070	Stress Management	3	26	29	1	4	5
	MGMT 3660	Management Information Systems	1	4	5	1	2	3
	MGMT 4160	Personnel Administration	2	26	28	2	2	4
		Subtotal	57	161	218	10	18	28
Education								
	EDUC 3320	Sociological Foundations	5	21	26	1	2	3
	EDUC 3340	Psychological foundations of Teaching	7	47	54	1	3	4
	LANG 2150	Argument Writing for Business	10	38	48	1	2	3
		Subtotal	22	106	128	3	7	10
Math, Science, & Technology								
	MATH 1030	Intermediate Algebra I	1	13	14	1	1	2
		Total	**80**	**280**	**360**	**14**	**26**	**40**

Table 4a. Enrollments and Section Numbers for Internet-based and Campus-based Courses in the Wayne Huizenga Graduate School of Business and Entrepreneurship.

Major	Course	Title	Students			Sections		
			Internet-based	Campus-based	Total	Internet-based	Campus-based	Total
Business Administration & Management								
	GMP 5012	21st Century Management	34	82	116	4	3	7
	GMP 5015	The Legal, Ethical, and Social Values of Business	27	74	101	3	2	5
	GMP 5017	Delivering Superior Customer Value	19	33	52	2	2	4
	GMP 5020	Managing Organizational Behavior	17	41	58	2	2	4
	GMP 5030	Managing Human Resources	13	31	44	2	2	4
	GMP 5040	Quantitative Thinking	25	29	54	3	2	5
	GMP 5050	Economic Thinking	12	35	47	2	2	4
	GMP 5060	Accounting for Decision Making	17	57	74	2	2	4
	GMP 5070	Managerial Marketing	17	40	57	2	2	4
	GMP 5080	Applying Managerial Finance	28	40	68	3	2	5
	GMP 5090	Entrepreneurial & Strategic Thinking	14	48	62	2	2	4
	GMP 5095	Operations & Systems Management	16	35	51	2	2	4
		Total	**239**	**545**	**784**	**29**	**25**	**54**

Table 5a. Enrollments and Section Numbers for Internet-based and Campus-based Courses in the Fischler Graduate School of Education and Human Services.

Major	Course	Title	Students			Sections		
			Internet-based	Campus-based	Total	Internet-based	Campus-based	Total
Curriculum & Instruction								
	CUR 0501	Ec. & Primary Education	3	6	9	2	2	4
	CUR 0502	Elementary Education	9	39	48	2	4	6
	CUR 0503	Middle School Education	3	13	16	2	3	5
	CUR 0504	Secondary School Education	11	27	38	2	3	5
		Subtotal	26	85	111	8	12	20
Education Administration and Supervision, General								
	EDL 0505	Education Budgeting and Finance	16	40	56	1	2	3
	EDL 0520	School Law for Administration	18	38	56	1	2	3
	EDL 0525	Personnel Selection and Development	12	46	58	1	3	4
	EDL 0545	School Improvement Process	9	60	69	1	3	4
	EDUC 0610	Classroom and Instruction Management	24	37	61	1	2	3
		Subtotal	79	221	300	5	12	17
Special Education, General								
	EP 0515	Instructional Strategies for Mentally Handicapped Students	9	25	34	1	3	4
	EP 0570	Nature & Needs of Mildly Handicapped Students	6	18	24	1	2	3
		Subtotal	15	43	58	2	5	7
		Total	**120**	**349**	**469**	**15**	**29**	**44**

Table 6a. Grade Distribution for Internet-based and Campus-based Undergraduate Sections.

Format	A	A-	B+	B	B-	C+	C	C-	D+	D	F	Blank	I	WU	WD	Total
Internet-based																
Number	25	15	8	6	3	2	1	0	0	1	3	1	6	3	6	**80**
Percentage	31.3%	18.8%	10%	7.5%	3.8%	2.5%	1.3%	0%	0%	1.3%	3.8%	1.3%	7.5%	3.8%	7.5%	**100%**
Campus-based																
Number	87	45	22	40	16	11	11	5	4	4	10	2	4	9	10	**280**
Percentage	31.1%	16.1%	7.9%	14%	5.7%	3.9%	3.9%	1.8%	1.4%	1.4%	3.6%	0.7%	1.4%	3.2%	3.6%	**100%**

Figure 1a. Grade Distribution for Internet-based and Campus-based Undergraduate Sections.

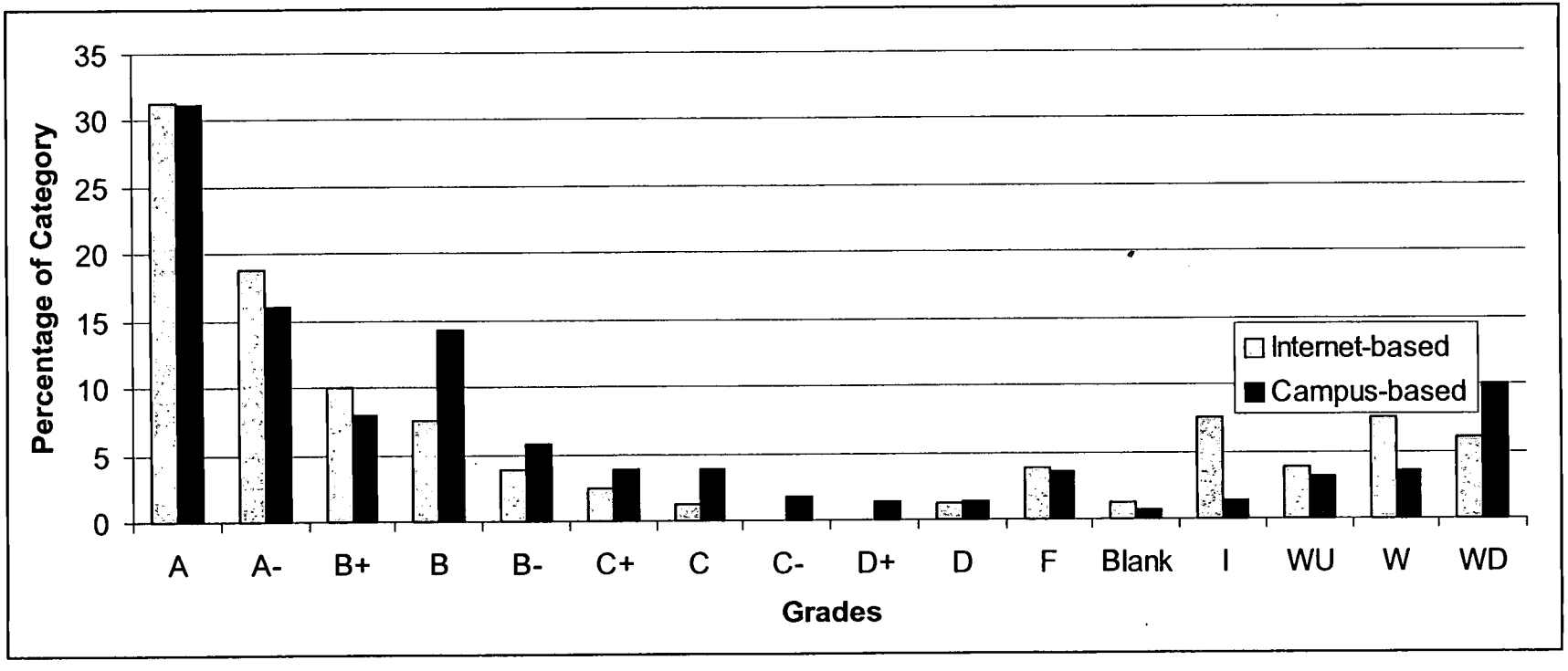

Table 7a. Grade Distribution for Internet-based and Campus-based Graduate Sections

Format	A	A-	B+	B	B-	C+	C	C-	F	Blank	I	WU	WD	Total
Internet-based														
Number	237	42	27	26	4	2	1	2	3	9	6	0	0	**359**
Percentage	66%	12%	7.5%	7.2%	1.1%	0.6%	0.3%	0.6%	0.8%	2.5%	1.7%	0%	0%	**100%**
Campus-based														
Number	440	117	80	135	14	7	18	0	6	53	22	1	1	**894**
Percentage	49%	13%	8.9%	15.1%	1.6%	0.8%	2%	0%	0.7%	5.9%	2.5%	0.1%	0.1%	**100%**

Figure 2a. Grade Distribution for Internet-based and Campus-based Graduate Sections

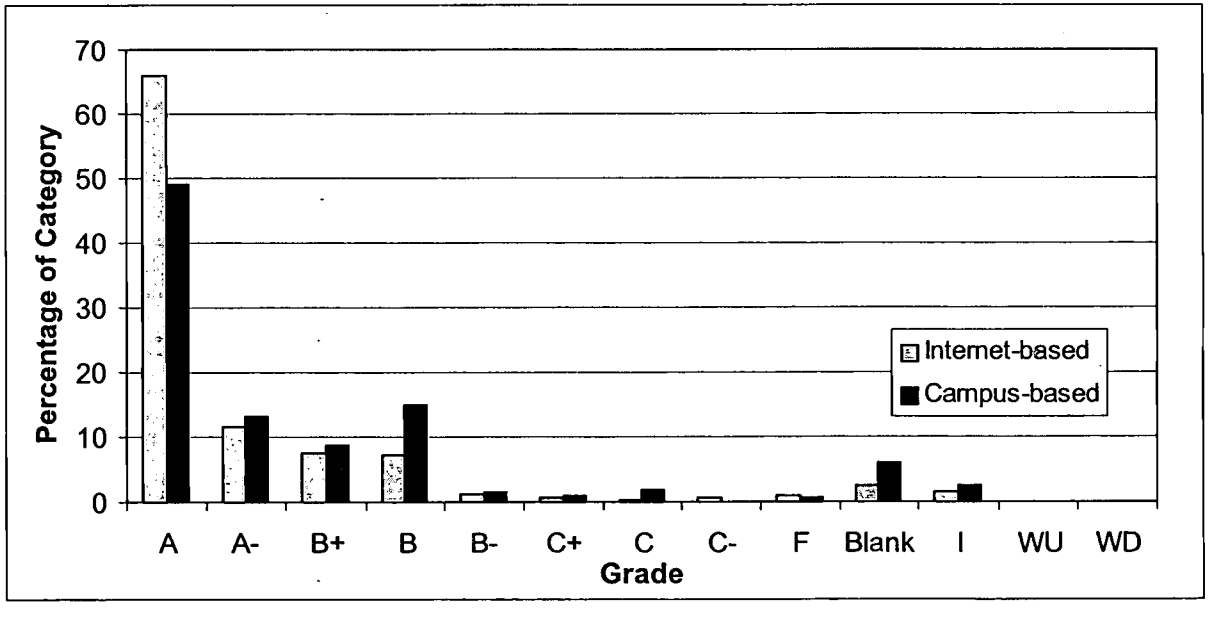

Table 8a. Rate of Successful Grades (category 2) for Graduate Students of the Wayne Huizenga Graduate School of Business and Entrepreneurship in Internet-based and Campus-based Sections.

	Format		
	Internet-based	Campus-based	Total
Successful			
Number	228	493	721
Percent	95%	90%	92%
Unsuccessful			
Number	11	52	63
Percent	5%	10%	8%
Total Students	239	545	784

Note: Wayne Huizenga Graduate School of Business and Entrepreneurship graduate students in Internet-based sections had a greater rate ($p = 0.02$) of successful final grades than graduate students campus-based sections.

Table 9a. Rate of Completions for Graduate Students of the Wayne Huizenga Graduate School of Business and Entrepreneurship in Internet-based and Campus-based Sections.

	Format		
	Internet-based	Campus-based	Total
Complete			
Number	230	496	726
Percent	96%	90%	93%
Incomplete			
Number	9	49	58
Percent	4%	10%	7%
Total Students	239	545	784

Note: Wayne Huizenga Graduate School of Business and Entrepreneurship graduate students in Internet-based sections had greater completion rates ($p = 0.01$) than graduate students in campus-based sections.

Table 10a. Rate of Successful Grades (category 1) for Graduate Students of the Fischler Graduate School of Education and Human Services in Internet-based and Campus-based Sections.

	Format		
	Internet-based	Campus-based	Total
Successful			
Number	113	318	431
Percent	94%	91%	92%
Unsuccessful			
Number	7	31	38
Percent	6%	9%	8%
Total Students	120	349	469

Note: Fischler Graduate School of Education and Human Services graduate students in Internet-based and campus-based sections had a similar rate ($p = 0.29$) of successful final grades.

Table 11a. Rate of Completions for Graduate Students of the Fischler Graduate School of Education and Human Services in Internet-based and Campus-based Sections.

	Format		
	Internet-based	Campus-based	Total
Complete			
Number	114	321	435
Percent	95%	92%	93%
Incomplete			
Number	6	28	34
Percent	5%	8%	7%
Total Students	120	349	469

Note: Fischler Graduate School of Education and Human Services graduate students in Internet-based and campus-based sections had similar completion rates, $p = 0.27$.

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